

THE PAST AND PRESENT STATUS OF THE
DAMSELFLY *COENAGRION PULCHELLUM*
(VAN DER LINDEN) (ODONATA: COENAGRIIDAE) —
IN CHESHIRE AND PARTS OF ITS ADJACENT
COUNTIES, CORRESPONDING TO THE
100KM SQUARE S J. (3 3).

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Introduction

The gradual disappearance in Britain this century of the damselfly *Coenagrion pulchellum* has been noted by Lucas (1900), Longfield (1949) and Hammond (1977), in their classic books on the British Odonata. In 1980, The Nature Conservancy Council publication 'The Conservation of Dragonflies' categorised the species as being 'locally common' in Britain, expressing the fear that the insect is 'fast declining and requires particular attention if it is not to reach endangered status'.

The most recent Biological Record Centre (B.R.C.) map, published in the second edition of Hammond (1983), shows the British distribution of the species to be mainly southern and eastern, with the notable exceptions of populations in Gloucestershire and Somerset, South Wales and Anglesey. In this context a series of thirteen specimens of *Coenagrion pulchellum* in the Merseyside County Museum collection, from Meols, Wirral, Cheshire (now Merseyside), was of interest. The specimens, nine male and four female, were all collected between 1939 and 1951 by W. K. Ford, a past Keeper of the museum's invertebrate zoology collections. Ford's comment in a letter to a local naturalist in 1971, that the damselfly had been 'common at times' on the Wirral, led to speculation that the species might still occur locally. The area chosen for investigation corresponds to the 100km. square S J. (3 3) and is centred on Cheshire and parts of its adjacent counties which fall within this boundary.

Pre 1984 records

B.R.C. records published in Hammond (1983):—

Whixall Moss, Shropshire (SJ. 4--, 3--), H. L. Burrows, 9.8.1931
(Manchester Museum specimen).

Between Leeswood and Mold, Clwyd (SJ. 2--, 6--), C. M. Swaine,
6.8.1944 (*Ent. Mon. Mag.* 82 : 42).

Marton Pool, Shopshire (SJ.293,025), D. A. L. Davies, 7.7.1947.

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Top Pool, Berrington, Shropshire (SJ.520,072), M. D'Oyly, — — 1980.

Berrington Pool, Shropshire (SJ.525,073), R. G. Kemp, 15.6.1980, (R. G. Kemp collection). (These last two records are both covered by the same 'dot' on the map).

Additional pre 1984 records:—

Rainhill, Lancashire (Merseyside) (SJ.4/5--, 9--), H. H. Higgins? pre 1900, (ex Merseyside County Museums specimen).

Frodsham, Cheshire (SJ.5--, 7--), 9.6.1892, L. Greening? (Warrington Museum specimen).

Hatchmere, Cheshire (SJ. 55-, 72-), 7.6.1900, L. Greening? (Warrington Museum specimens).

Delamere Forest, Cheshire (SJ.5--, 7--), W. M. Tattersall, 27.5.1915, (Lucas W. J. *Lancashire and Cheshire Naturalist*, 12: 55-60).

Newchurch Common, Cheshire (SJ.6--, 6--), C. R. Brown, 31.5.1915, (Lucas W. J. *Lancashire and Cheshire Naturalist*, 12: 55-60).

Delamere Forest, Cheshire (SJ.5--, 7--), A. R. Jackson, -6.1920, (Lucas, W. J. *Lancashire and Cheshire Fauna Committee Report*, 8:10-11).

Sinderland, Cheshire (Greater Manchester) (SJ.7--, 9--), H. Britten, 15.6.1922, (Manchester Museum specimens).

Meols, Cheshire (Merseyside) (SJ.23-, 89-), W. K. Ford, 9.6.1939, 11.6.1939, 30.6.19--, 6.7.1947, 1.7.1950, (Merseyside County Museums specimens).

Between Manley and Hatchmere, Cheshire (SJ.5--, 7--), J. P. Savidge, 1950-1953, (Ford, W. K. *North Western Nauralist*, 2(XXV): 602-603).

Upton, Cheshire (Merseyside) (SJ.27-, 88-), W. T. C. Rankin, 17. 5.1952, (*Birkenhead School Natural History Society Journal*, 1952:15.).

Landican, Cheshire (Merseyside) (SJ.28-, 85-), N. I. Dalziel, 20.6. 1953, (*ibid.* 1953:13).

Landican, Cheshire (Merseyside) (SJ.28-, 85-), W. T. C. Rankin, 27.5.1961, (*ibid.* 1953:14).

The B.R.C. map published in Hammond (1983), contains only three pre-1960 records and one post-1960 record. Another fourteen

site records have been added to this (above). Ideally a voucher specimen is necessary to substantiate records for *Coenagrion pulchellum* as confusion can arise between this species and the widely distributed *Coenagrion puella* (L.), 'both species have variations which may overlap' Hammond (1983). The Merseyside, Manchester and Warrington museum specimens were all correctly identified. I am satisfied that the Birkenhead School records are correct; W. K. Ford accepted them in his *Odonata of Lancashire and Cheshire* (1953 and 1954), and there is a correctly identified, non data specimen in the School's collection. The Rainhill specimen was verified by Ford (1953), but is no longer in the Merseyside County Museum collection. Voucher specimens for the Betton Pool and Berrington Pool sites are housed in the collection of R. G. Kemp. The remaining records are not known to be substantiated by existing voucher specimens, although many were accepted and published by W. J. Lucas in his *Odonata of the Lancashire and Cheshire District* (1919) and in a subsequent addition to this list (1922).

1984 Status

A search for *Coenagrion pulchellum* in 1984 was guided by the past distribution records for the species, centred on the Wirral peninsula, Delamere Forest, and some of the larger Cheshire and Shropshire meres. Other site information was kindly provided by R. G. Kemp and B. J. Walker. The damselfly was re-discovered at Hatchmere, Cheshire, on the edge of Delamere Forest (SJ.533,722). A chance meeting at Hatchmere with a local naturalist, Mr. B. J. Walker, revealed that the damselfly had been common there since 1977, when he first visited the site. Two new sites were discovered for the species at Hanmer Mere, Clwyd (SJ.454, 397) and a pool in Little Budworth Country Park (SJ.587,658). The insect was abundant at Hatchmere and Hanmer Mere, but Mr. Walker has only recorded a few males from Little Budworth. 1984 voucher specimens for the Hatchmere and Hanmer Mere sites are held in the Merseyside County Museums collection. Mr. R. G. Kemp has also kindly informed me that the damselfly was common at Berrington Pool (SJ.525,073) and Top Pool Berrington (SJ.520,072) in 1984. It is presumed that the species can still be found at Betton Pool (SJ.520,072).

The damselfly's habitat at Landican and Upton on the Wirral has been destroyed by modern housing developments. There is no evidence of the damselfly at Meols; the only large water body is now heavily pressurised by fishermen, most of the local marl pit ponds have been filled in and many of the streams and ditches between Meols and the Mersey estuary are canalised and polluted. The Sinderland, Rainhill and Marton Pool sites were not visited. Most of the larger Shropshire and Cheshire meres were visited, but in the time available no further records were found.

Discussion

Coenagrion pulchellum was historically far more widely distributed in Cheshire and its adjacent counties than it appears to be today. The damselfly's disappearance from many of these localities would seem to be due, in part, to the combined environmental pressures of urbanisation and agricultural intensification. Except for the pool at Little Budworth Country Park, the sites where the damselfly was found in 1984, are all large relatively undisturbed water bodies, rich in nutrients and fringed with emergent vegetation. They do not seem to fit Hammond's (1983) description of the typical habitat for the species as being, 'characterised by watermeadows and dykes'. It is possible that these larger undisturbed water bodies might be the last refuges for the species in the study area.

These findings do in part enforce the Nature Conservancy Council's view that the species is 'fast declining and requires particular attention'. However, I am sure that because of similarities with the common *Coenagrion puella*, *Coenagrion pulchellum* is, and always has been, under recorded in the study area. The addition of the new sites in 1980 and three more in 1984 provides some encouragement. I am optimistic that further new sites for *Coenagrion pulchellum* might be discovered if a systematic search of the area is made, especially of the larger water bodies around Mold, Wrexham and the Cheshire flashes.

Acknowledgements

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PYRGUS MALVAE L. IN MID-JULY. — While collecting on the chalky part of Foulden Common, W. Norfolk, on 14th July last, I swept a specimen of the grizzled skipper, a butterfly I had supposed long over by that date. Had it been worn, there might have been little cause for surprise; but in fact it appeared in faultless condition, neither rubbed nor chipped. No others of the species seemed to be about. Whether, therefore, it was an individual whose development had for some obscure reason been retarded, or one of an exceptional second brood such as are occasionally noted, is a question I leave to readers better qualified to judge. — A. A. ALLEN.

A LATE SPILOSOMA LUTEUM HUFN. (BUFF ERMINE). — On 18th August, 1985, I came upon a quite undamaged and fresh-looking male of this familiar insect sitting on the pavement by a busy road not far from my house, slightly overhung by bushes in an adjoining park. One of these, almost above the spot, was a white-flowered buddleia — to which possibly the moth had been attracted whilst in flight the previous night; and from which it may have fallen shortly before I arrived on the scene, luckily escaping the feet of passers-by. It seems that normally the species is over by mid-July or thereabouts, and that August specimens are exceptional. — A. A. ALLEN.

MYTHIMNA LOREYI (DUR.) (THE COSMOPOLITAN) IN WEST WALES — I was pleased to capture a fine specimen of *loreyi* at Tregaron, Dyfed on the night of 10th October 1985. I believe this is the first record of this immigrant species in Dyfed. My thanks are due to Mr. A. Riley of Rothamsted for confirming my identification. I. J. L. TILLOTSON Chief Warden, NCC Dyfed Powys Region.

OECOPHORA BRACTELLA (LINNAEUS) (LEP: OECOPHORIDAE) IN DEVON. — On 2nd. May 1985 I bred one specimen of this species from a larva I found under the bark of a stump of *Betula* on 17th. March at Spitchwick Common, Devon. This is a wooded area on the southern edge of Dartmoor about 4 miles to the west of Ashburton. It appears that this is the first record for the county and only the fifth vice-county record in the British Isles. R. J. HECKFORD, 67, Newnham Road, Plympton, Plymouth.